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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,936	08/09/2002	Jutta Glock	PH/5-31140A	4690

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EXAMINER	
QAZI, SABIHA NAIM	

ART UNIT	PAPER NUMBER
1612	

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05/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/070,936	GLOCK ET AL.	
	Examiner	Art Unit	
	Sabiha Qazi	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Final Office Action

Claims 1-17 are pending. No claim is allowed at this time. Amendments are entered.

Summary of this Office Action dated May 10, 2008

1. 35 USC § 112 --- First Paragraph written Description Rejection
2. 35 USC § 103(a) Obviousness Rejection – First Rejection
3. 35 USC § 103(a) Obviousness Rejection – Second Rejection
4. Response to Remarks
5. Conclusion
6. Communication

Claim Rejections - 35 USC § 112—Written Description Rejection

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-17 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Following reasons apply.

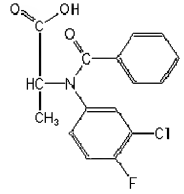
No synergism has been disclosed in the specification, which has been claimed. Applicant had no possession at the time this application was filed of claimed. The specification discloses the combination of compound 1.008 (one compound from formula (I) and cloquitocet-mexyl with tralkoxydim, fenoxaprop-ethyl and trisulfuron (see tables B2.1 to B2.4 on pages 43 and 44 in specification). The compounds of (b) as in claim 1 contains compounds having variety of different structures, which surely are expected to react differently. The prediction of **synergism** for the combination such a large number

of compounds (b) having different properties and compound of formula (I) is therefore impossible.

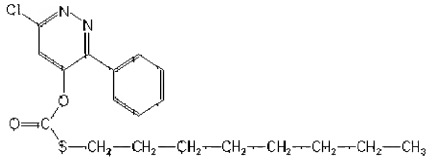
combinations such as COMBINATION OF COMPOUND 1.008 AND CLOQUITOCET-MEXYL, Tralkoxydim, fenoxaprop-ethyl and trisulfuron (pages 43 and 44 in the specification Tables B2.1 to B2.4 with oil additive MERGE) does not possess for the combination of all the various classes of herbicides for example classes of compounds include pyrimidines, triazines, "as well as from the herbicides amitrol, benfuresate, bentazone, cinmethylin, clomazone, chlopyralid, difenzoquat, dithiopyr, ethofumesate, flurochloridone, indanofane, isoxaben, oxaziclomefone, pyridate, pyridafol, quinchlorac, quinmerac, tridiphane, nlufosinate and flamprop" and many others.

Compound of formula (I)itself include very large number of compounds due to variety of substituents defined by G, R_1 and R_2. The compounds represented by the formula (I) in claim 1 contain large number of compounds, and combination of (b) such as a herbicidally effective amount of at least selected from the classes of phenoxypropionic acids, hydroxylamines, sulfonylureas, imidazolinones, pyrimidines, triazines, ureas, PPO, chloroacetanilides, phenoxyacetic acids, triazinones, dinitroanilines, azinones, carbamates, oxyacetamides, thiolcarbamates, azole-ureas, benzoic acids, anilides, nitriles, triones, and sulfonamides, as well as from the herbicides amitrol, benfuresate, bentazone, cinmethylin, clomazone, chlopyralid, difenzoquat, dithiopyr, ethofumesate, flurochloridone, indanofane, isoxaben, oxaziclomefone, pyridate, pyridafol, quinchlorac, quinmerac, tridiphane, nlufosinate and flamprop.

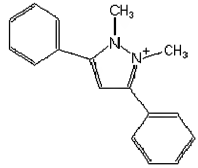
The compounds of formula I itself includes thousands of compounds and their combination with the multitude of different classes of herbicides which can be selected from the classes of phenoxypropionic acids, hydroxylamines, sulfonylureas, imidazolinones, pyrimidines, triazines, ureas, PPO, chloroacetanilides, phenoxyacetic acids, triazinones, dinitroanilines, azinones, carbamates, oxyacetamides, thiolcarbamates, azole-ureas, benzoic acids, anilides, nitriles, triones, and sulfonamides, as well as from the herbicides amitrol, benfuresate, bentazone, cinmethylin, clomazone, chlopyralid, difenzoquat, dithiopyr, ethofumesate, flurochloridone, indanofane, isoxaben, oxaziclomefone, pyridate, pyridafol, quinchlorac, quinmerac, tridiphane, nlufosinate and flamprop. These classes are so different from each other; it is impossible to predict any SYNERGISTIC activity for such compounds.. For example, the three structures shown below belong to extremely different class of chemical compounds.



flamprop



pyridate



difenzoquat

There is no guidance in the disclosure on how THE INVENTION CAN BE USED TO PREDICT THE SYNERGISM FOR LARGE CLASSES OF HERBICIDES successfully. **There is no teaching or data to show that combination of the compounds of formula 1 with all the various classes of herbicides listed in part b) of claim 1.**[1]

Applicant is kindly requested to show that at the time of invention Applicants were in possession of the claimed invention

[1] Examiner notes that Applicants in the specification disclose that "a specific safener will often be suitable only for a specific action with respect not only to the cultivated pants but also to the herbicide, and in some cases also subject to the mode of application, i.e. a specific safener will often be suitable only for a specific cultivated plant and a specific class of herbicide. See paragraph 3 on page 1 of the specification.

The written description requirement prevents applications from using the amendment process to update the disclosure in their disclosures (claims or specification) during the pendency before the patent office. Otherwise applicants could add new matter to their disclosures and date them back to their original filing date, thus defeating an accurate accounting of the priority of the invention. See 35 USC 132. **The function of description requirement is to ensure that the inventor had possession, as of filing date of the application relied on, the specific subject matter claimed by him.**

See *Genetech,* 108 F 3d 1361, 1365 (Fed. Cir. at 1366, 78, 1999).

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to one skilled in the art that the inventor had the possession at the time of the later claimed subject matter**, rather than the presence or absence of literal support in the specification for the claimed language.** See In re Kaslow, 707 F 2d 1366, 1375 (Fed. Cir. 1983).

35 USC § 103(a) Obviousness Rejection – 1st Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over MUHLEBACH et al.[2] The reference teaches 3-Hydroxy-4-aryl-5-oxopyrazoline derivatives as herbicides in particular in combination with herbicide-antagonistically effective compounds which embraces presently claimed invention. The reference also teaches the use of oil in composition, it may be natural in origin or mineral. See especially page 17 for oils and surfactants.

The instant invention is drawn to a selective herbicidal composition comprising (a) herbicidally effective amount of a compound of Formula I and (b) a herbicidally effective amount of at least selected from the classes of phenoxypropionic acids, hydroxylamines, sulfonylureas, imidazolinones, pyrimidines, triazines, ureas, PPO, chloroacetanilides, phenoxyacetic acids, triazinones, dinitroanilines, azinones, carbamates, oxyacetamides, thiolcarbamates, azole-ureas, benzoic acids, anilides, nitriles, triones, and sulfonamides, as well as from the herbicides amitrol, benfuresate, bentazone, cinmethylin, clomazone, chlopyralid, difenzoquat, dithiopyr, ethofumesate, flurochloridone, indanofane, isoxaben, oxaziclomefone, pyridate, pyridafol, quinchlorac, quinmerac, tridiphane, nlufosinate and flamprop.

Instant claims differ from the reference in claiming a synergistic and broader combination of compounds than the prior art.

Therefore, it would have been obvious to one skilled in the art at the time invention was made to prepare additional beneficial composition because prior art teaches the combination of the structurally similar 3-Hydroxy-4-aryl-5-oxopyrazoline derivatives of formula I and other "herbicide-antagonistically effective compounds". Claimed invention also claims the combination of the compounds of formula (I) and at least one safener and/or herbicide. It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. *In re Kerkhoven,* 205 USPQ 1069.

Since synergism cannot be predicted for such a large number of combinations of compounds and the specification does not disclose any direction for the expectation of synergism, instant invention is considered obvious over the prior art.
Furthermore, because of each compound appears to be well known in the prior art, it would appear that the combination of the compounds would have been obvious in view of MPEP 2144.06 and see Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

See Ex parte Quadranti where it was held that

[2] WO 99/47525. See the entire document especially abstract, compound of formula (I) on page 1, when R4 and R5 form together (Z2), examples and Tables (especially Tables 7 and 8).

"Use of materials in combination, each of which is known to function for intended purpose, is generally held to be prima facie obvious, and in instant case, use of combination of herbicides is so notoriously well known as to be capable of being taken by official notice; generalizations such as Colby formula are not particularly useful in determining whether synergism has been demonstrated, since formula inherently results in expectation of less than additive effect for combination of herbicides, since there is no evidence that such approach is considered valid by significant number of ordinarily skilled workers in relevant area of technology, and since it could be reasonably argued that in most cases, additive or better than additive results could be expected for combination of herbicides."

"There is no single, appropriate test for determining whether synergism has been demonstrated for chemical combination; rather, facts shown in each case must be analyzed to determine whether chosen method has clearly and convincingly demonstrated existence of synergism or unobvious result".

"Assuming arguendo that the differences in values presented are statistically significant, there is no evidence that they represent a true, practical advantage. In re Freeman, 474 F.2d 1318, 177 USPQ 139 (CCPA 1973); In re Klosak , 455 F.2d 1077, 173 USPQ 14 (CCPA 1972); In re D'Ancicco, 439 F.2d 1244, 169 USPQ 303 (CCPA 1971). Also, prescinding from the Colby formula test, which as we have already indicated is at best controversial and in our view probably invalid, there is no evidence that the differences

are unexpected. In re Merck, 800 F.2d 1091, 231 USPQ 375 (Fed.Cir. 1986); In re Longi , 759 F.2d 887, 225 USPQ 645 (Fed.Cir. 1985); In re Freeman, supra" .

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

35 USC § 103(a) Obviousness Rejection – 2nd Rejection

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over MUHLEBACH et al. in view of HAZEN et al.[3] and the disclosure of Applicants own specifications. The reference MUHLEBACH teaches 3-Hydroxy-4-aryl-5-oxopyrazoline derivatives as herbicides in particular in combination with herbicide-antagonistically effective compounds which embraces presently claimed invention. The reference also teaches the use of oil in composition, it may be natural in origin or mineral. See especially page 17 for oils and surfactants. Applicants in their specification disclose that all the compounds are known; they found the synergistic combination and are claiming synergistic compositions.

The instant invention is drawn to a selective herbicidal composition comprising (a) herbicidally effective amount of a compound of Formula I and (b) a herbicidally effective amount of at least selected from the classes of phenoxypropionic acids,

hydroxylamines, sulfonylureas, imidazolinones, pyrimidines, triazines, ureas, PPO, chloroacetanilides, phenoxyacetic acids, triazinones, dinitroanilines, azinones, carbamates, oxyacetamides, thiolcarbamates, azole-ureas, benzoic acids, anilides, nitriles, triones, and sulfonamides, as well as from the herbicides amitrol, benfuresate, bentazone, cinmethylin, clomazone, chlopyralid, difenzoquat, dithiopyr, ethofumesate, flurochloridone, indanofane, isoxaben, oxaziclomefone, pyridate, pyridafol, quinchlorac, quinmerac, tridiphane, nlufosinate and flamprop.

The MUHLEBACH teaches the composition that has been claimed and also use of oil additives except that combination of oil additives increases the herbicidal action[4].

HAZEN et al. teaches that addition of oil in composition increases the herbicidal activity (abstract). It teaches that certain crop oil concentrates enhance the activity of a broad spectrum of herbicides to an unexpected high level. Furthermore, it teaches these "same crop oil concentrates surprisingly defeat the antagonism which is often created when two or more herbicides are utilized simultaneously" (lines 58-63 in col. 1). See lines 31-57 in column 4, lines 58-65 in col. 4., the abstract, tables especially tables IX and XI and examples 1-3 in col. 4.

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time of invention was made to modify the composition of MUHLEBACH to include the additive oils as taught by HAZEN because there is a motivation to obtain enhanced herbicidal activity by adding oils. MUHLEBACH teaches the combination of the

[3] US Patent 4,834,908, see abstract, lines 58-63 in column 1; lines 1-2 in col. 1; lines 1-68 in col. 3examples 1-3lines 35-68 in col. 3.

structurally similar 3-Hydroxy-4-aryl-5-oxopyrazoline derivatives of formula I and other "herbicide-antagonistically effective compounds". One having ordinary skill in the art would have been motivated to add oil in the composition to enhance the herbicidal activity because this modification would have been obvious. (See especially abstract in Hanzel). It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in the prior art. *In re Kerkhoven,* 205 USPQ 1069.

Since synergism cannot be predicted for such a large number of combinations of compounds and the specification does not disclose any direction for the expectation of synergism, instant invention is considered obvious over the prior art.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill might reasonably infer from the teachings. *In re opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA 1976). A reference is not limited to working examples. *In re Fracalossi* 215 USPQ 569 (CCPA 1982).

Accordingly, the burden of proof is upon applicants to show that instantly claimed subject matter is different and unobvious over those taught by prior art. See *In re Brown*, 173 USPQ 685, 688; *In re Best*, 195 USPQ 430 and *In re Marosi*, 218 USPQ 289, 293.

In absence of any criticality and/or unexpected results presently claimed invention would have been *prima facie* obvious to one skilled in the art.

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[4] Even though the addition of oil has not been cited in the claims this has been addressed (Hazen et al)

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Response to Remarks

Applicants arguments were fully considered but are not found persuasive therefore the rejection is maintained. Examiner respectfully disagrees because statutory statement of 102 (e) is the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, **except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language, (emphasis added). The reference WO 99/47525 is designated to US and therefore its priority goes to at least March 13, 1998.**

The specification teaches that all compounds are known so even if the dates are not good, the basis remains for 112 rejections that Applicant has not shown synergism to commensurate the scope of the claims.

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because the specification of present invention discloses the use of oil for increasing the herbicidal action.

- Double Patenting rejection over claims 14-18 of U.S. Patent No. 6,410,480 was previously withdrawn because terminal disclaimer has been filed and approved.
- Declaration was fully considered but was not found persuasive because first, synergism was not found in the data disclosed in the declaration; second, it does not commensurate with the scope of claims. Declaration of each combination was discussed in a personal interview with Attorney Jacqueline Haley on 8/27/2007. Rejections are maintained for the same reasons as set froth in the previous office action.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day except Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krass Frederick can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sabiha Qazi/

Primary Examiner, Art Unit 1612